Louisiana Office of Public Health Laboratories	
Test Name	Chikungunya Real Time rt-PCR
PHL Location	Office of Public Health Laboratory Baton Rouge
CPT Code	87798 x 2
Synonyms	CHIK-V
Brief Description of Test	Prior authorization required. Contact Infectious Disease Epidemiology at 800-256-2748.  The Chik-V Real-Time RT-PCR assay is used on the ABI 7500 Fast Dx Real-Time PCR Instrument. There are two primer/probe sets available for the detection of Chik-V RNA. Chik Set 1 (3855/3957c/3886FAM) and Chik Set 2 (856/962c/908FAM). These two sets are broadly reactive, detecting both Asian and the ECSA genotypes.
Possible Results	Negative for Chikungunya Positive for Chikungunya Equivocal for Chikungunya Inconclusive
Reference Range	Negative
Specimen Type	Serum
Specimen Container(s):	Red top tubes, Marble top tubes, polypropylene vials
Minimum volume accepted:	300 μL
Collection Instructions	Specimens should only be collected by personnel that have been properly trained. Care should be taken during specimen collection and handling to avoid generation of aerosols. Blood should be collected in a plastic tube, such as a vacutainer, which does not contain an anticoagulant. The collection tube may or may not contain a serum separator. If collected in a tube without serum separator, serum must be aliquoted into screw cap tubes before shipment to laboratory. Depending on the type of collection tube, the amount of time it will take for the blood to clot could take up to 60 minutes. Separation of serum from cells should take place within 2 hours of collection to prevent erroneous test results according to NCCLS guidelines.  Follow the package insert for the collection tube you use.  Label specimen with Patient Name and a 2 <sup>nd</sup> unique identifier such as a chart number or medical record number. DOB is not considered unique.

	Complete a Lab Form 96 to accompany the serum sample. Lab submission form must be thoroughly completed with patient's first and last name, 2 <sup>nd</sup> patient identifier, gender, date of birth, date of collection, time of collection, onset date, test requested, and submitter's name, address, and contact number.  Two unique identifiers <b>MUST</b> be recorded on the tube <b>AND</b> the Lab 96 form. A missing identifier on the tube will be an automatic rejection. If the identifiers are missing from the Lab 96 form, the submitter must be contacted and a new form with this information
	must be faxed back to the lab before testing will take place.  Transport specimen to laboratory as soon as possible after
Storage and Transport Instructions	<ul> <li>collection. Keep submission forms insulated from specimens.</li> <li>Once there is a clinical diagnosis of suspected chikungunya, take a venous, whole blood sample.</li> <li>Follow serum specimen collection devices manufacturer instructions for proper collection, separation and storage methods.</li> <li>We recommend that separated serum samples are frozen at -20°C and sent or shipped in dry ice to the testing laboratories. If dry ice is not available, we recommend that separated serum is maintained on ice or in a refrigerator for no longer than 2 hours before it is either frozen at -20° C or tested.</li> <li>Transport/ship human serum samples in dry ice. Document the date and time sample was frozen.</li> </ul>
Causes for Rejection	Unspun samples, tubes that contain less than 90% of the total drawing capacity (QNS), incorrect specimen type, or expired collection tubes must be rejected. Improper storage and improper transport temperature requirements are also reasons for rejection.
Limitations of the Procedure	This assay is very dependent on the timing of specimen collection. Specimens collected within 7 days of illness onset will yield the best results.     Phi/ml   IgM   Phi   20   Phi/ml   IgG   Neutralizing Ab   Phi   Phi
Interfering Substances	N/A

References	Package Insert: CDC CHIK-V Real Time RT-PCR Assay
Additional Information	This assay is not FDA approved. Assay performance characteristics have been determined by the Louisiana Office of Public Health Central Lab.
Release Date	03/15/2016

Warning: If you have printed a copy of this information please be advised that the Louisiana Office of Public Health Laboratories website and methods are updated on a regular basis. Please check the on-line version of this document to ensure you are relying on the most recent release.

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